The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A drying system for the processing of pulp into singulated and dried fibers comprising:

a jet drier with a jet conduit, a pulp intake for delivery of pulp into the jet conduit, a manifold for air intake into the jet conduit, and a fiber outlet for removal of singulated and dried fibers, outlet air and fines from the jet conduit;

a pulp supply station coupled to the pulp intake for supplying a feed pulp to the pulp intake, the pulp supply station including a treatment supply source for delivering a crosslinker to the pulp;

an air supply station coupled to the manifold for delivering air to the manifold;

an outlet flow conduit coupled to the fiber outlet for the removal of the fibers, outlet air, and fines from the jet conduit; and

a fiber separation station coupled to the outlet flow conduit for separating the fibers from the outlet air.

2. The drying system of Claim 1, further comprising:

a curing station operatively associated with the fiber separation station for curing the crosslinker treated fibers from the fiber separation station.

3. The drying system of Claim 2, wherein the curing station includes a curing oven.

4. The drying system of Claim 3, wherein the curing station includes a flash drier and a curing oven, the flash drier operatively associated with the fiber separation station for further drying of the fibers, the curing oven operatively associated with the flash drier for curing the crosslinked treated and further dried fibers.

5. The drying system of Claim 1, wherein the pulp supply station further includes a first dewatering device and a second dewatering device in flow communication with the first dewatering device; the first dewatering device receiving a pulp supply having a liquid content, removing a portion of the liquid content, and sending a dewatered supply pulp to the second dewatering device; the treatment supply source delivering the treatment substance to the dewatered supply pulp prior to entry into the second dewatering device; and the second dewatering device removing additional liquid content from the treated and dewatered supply pulp and sending a treated feed pulp to the jet drier pulp intake.

6. The drying system of Claim 5, wherein the pulp supply station further includes a treatment recycle conduit in flow communication between the first dewatering device and the second dewatering device; and wherein the treatment recycle conduit delivers at least a portion of the additional liquid content from the second dewatering device to the first dewatering device.

7. The drying system of Claim 6, wherein the pulp supply station further includes a holding tank device inserted in the treatment recycle conduit; and wherein the holding tank device stores at least a portion of the additional liquid content from the second dewatering device and disperses the additional liquid content to the first dewatering device.

8. The drying system of Claim 5, wherein the pulp supply station further includes a treatment recycle conduit in flow communication between the first dewatering device and the treatment supply source; and wherein the treatment recycle conduit delivers at least a portion of the additional liquid content from the second dewatering device to the treatment supply source.

9. The drying system of Claim 8, wherein the pulp supply station further includes a holding tank device inserted in recycle conduit; and wherein the holding tank device stores at least a portion of the additional liquid content from the second

dewatering device and disperses the additional liquid content to the treatment supply source.

10. The drying system of Claim 1, wherein the pulp supply station further includes a pulp feed device coupled to the pulp intake for delivering the feed pulp to the pulp intake while minimizing the amount of air flow through the pulp supply station, the pulp feed device being a rotary airlock including a rotor housing and a rotor rotatably mounted within the rotor housing, the rotor having rotor vanes for transporting the feed pulp, wherein the rotor vanes and rotor housing are sized so that a gap exists between the rotor vanes and the rotor housing to prevent the feed pulp from jamming the rotary airlock.

11. The drying system of Claim 10, wherein said gap between said rotor vanes and said housing is in the range of .010 to .050 inches.

12. The drying system of Claim 1, wherein the pulp supply station further includes a foam feeder coupled to the pulp intake for delivering the feed pulp to the pulp intake for mixing a surfactant with pulp and directly injecting foamed pulp mixture into the jet drier.

13. The drying system of Claim 1, wherein the fiber separation station includes a vacuum conveyor having a screen for passing outlet air and retaining fibers on the screen a first roller, a second roller, a primary fan, a secondary fan, a primary fan vacuum box, and a secondary fan vacuum box; said screen being a continuous loop draped about the first and second rollers so that the screen has an upper portion and a lower portion; the upper portion of the screen having an upper and lower surface; the upper surface of the screen being associated with the outlet flow conduit; the primary fan vacuum box being associated with the lower surface and in flow communication with the primary fan; the primary fan vacuum box being positioned between the lower and upper portions and directly beneath the outlet flow conduit; the secondary fan vacuum box being associated with the lower surface and in flow communication with the secondary fan; the secondary fan vacuum box being

positioned between the lower and upper portions and between the primary fan vacuum box and the second roller; the primary fan providing vacuum to the primary fan vacuum box and the outlet flow conduit; the secondary fan providing vacuum to the secondary fan vacuum box and the upper surface.

14. The drying system of Claim 13, wherein the fiber separation station further includes a screen vacuum for removing excess fiber from the screen prior to the screen receiving fibers from the outlet flow conduit, the screen vacuum being associated with the upper surface between the outlet flow conduit and the first roller.

15. The drying system of Claim 13, wherein the fiber separation station further includes a separation device, wherein the secondary fan vacuum box has a vertical wall facing the second roller, the separation device being associated with the upper screen directly above the vertical wall so that the fibers may pass over the separation device to release the fibers from the screen as well as from the vacuum of the secondary fan.

16. The drying system of Claim 13, wherein the fiber separation station further includes an out feed roller, the out feed roller being associated with the upper surface of the screen between the outlet flow conduit and the second roller so that the out feed roller may contact the fibers and pull the fibers from the outlet flow conduit.

17. The drying system of Claim 13, wherein the fiber separation station further includes a head box with a head box shell, an out feed roller and a dynamic lip seal; the head box shell being a conduit having an inlet and an outlet for the passage outlet air, fibers and fines from the outlet flow conduit to the upper surface; the head box shell being positioned between the upper surface and the outlet flow conduit and being coupled to the outlet flow conduit and associated with the upper surface; the out feed roller being movably coupled to the side of the outlet of the head box shell facing the second roller so that the out feed roller may move vertically to adjust for varying retained fiber thickness; the dynamic lip seal being movably coupled to the side of the outlet of the head box shell facing the second roller so that

the dynamic lip seal may move vertically to adjust for varying retained fiber thickness while maintaining a vacuum seal with the upper surface.

18. The drying system of Claim 17, wherein the head box further includes a pair of drive wheels and a coupling device, the drive wheels being rotatably coupled to the side of the outlet of the head box shell facing the first roller and is associated with the upper surface so that the motion of the upper surface results in the drive wheels rotating, the coupling device being coupled to the drive wheels and the out feed roller so that the rotation of the drive wheels acts on the coupling device which in turn acts on the out feed roller.